

REMARKS/ARGUMENTS

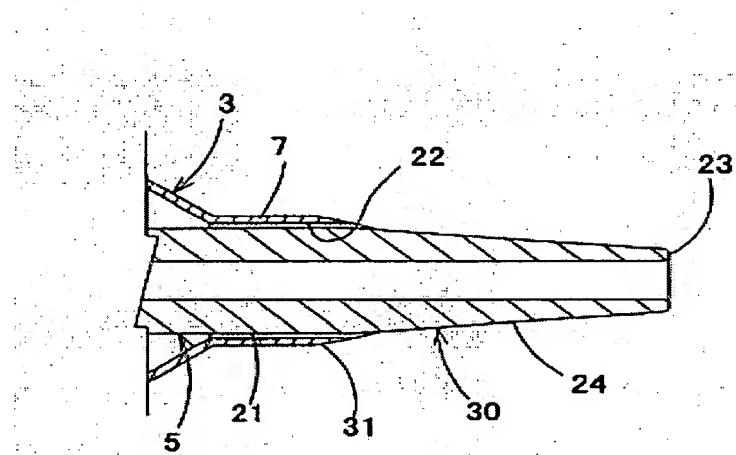
Claims 1, 3, and 5-12 are pending in the application. No amendments have been made in this paper. Reconsideration of this Application is respectfully requested.

35 U.S.C. §102 Rejections

Claims 1, 7, 9, 11 and 12 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,706,010 to Miki *et al.*, hereinafter "Miki." Applicant traverses this rejection because Miki fails to teach all the elements of the claims.

Miki does not teach "applying a tensile force to the joint, the force being sufficient to elongate the joint, thus thinning the joint," as required in part by claim 1. Although Miki does not teach the claimed method related to thinning joint 22, Miki does teach disparate techniques for creating taper portion 24 and taper portion 31 illustrated in figure 12 below.

Fig. 12



Local abrasion is performed on the distal end portion of the joint 22 to form the taper portion 31. Next, the portion of the inner tube 5 protruding to the distal end side beyond the joint 22 and which is near the distal end portion of the taper portion 31 is locally heated, and the proximal end portion of the distal end-side balloon joint 22 of the balloon 3 and the distal end portion of the inner tube 5 are clamped and subjected to a tensile force, which stretches this portion to a specific length and reduces its diameter. This constricted portion of the inner tube 5 is then cut so as to form the distal end taper portion 24. Column 17, lines 3-14, emphasis supplied.

Thus, Miki teaches the use of local heating and stretching to reduce the diameter, or constrict only the portion of inner tube 5 protruding distally beyond joint 22. Joint 22 between balloon neck ("sleeve") 7 and inner tube 5 is abrasively tapered at its distal end to form taper 31. However, joint 22 itself is not taught as being elongated, stretched or thinned in any way. Miki explicitly distinguishes between the techniques proposed for creating tapers 24 and 31, as follows:

The working of the distal end taper portion 24 of the inner tube 5 and the working of the taper portion 31 in the distal end portion of the distal end-side balloon joint 22 may comprise stretching by local heating and local abrasion, respectively. (Column 17, lines 18-22)

As taught by Miki, "stretching by local heating" is not applied to joint 22. Therefore, Applicant reiterates that Miki does not teach "applying a tensile force to the joint, the force being sufficient to elongate the joint, thus thinning the joint," as required in part by claim 1. Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim. See *Jamesbury Corp. v. Litton Indus. Prods.*, 756 F.2d 1556. Miki fails to anticipate claim 1 because the reference does not teach all the elements of the claim.

Claim 7 depends from claim 1 and is patentable for the same reasons that claim 1 is patentable. Furthermore, Miki fails to teach "the tensile force is applied to a heated joint," as required in part by claim 7. Instead, Miki teaches applying tensile force and heat only to "the portion of the inner tube 5 protruding to the distal end side beyond the joint 22," as mentioned above. Nowhere does Miki teach applying heat and tension to joint 22 itself.

Claims 9, 11 and 12 depend directly or indirectly from claim 1 and are patentable for the same reasons that claim 1 is patentable. In view of the above arguments, Applicant requests that the rejections under 35 U.S.C. §102 be withdrawn.

35 U.S.C. §103 Rejections

Claims 5 and 8 have been rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Miki. The Examiner states that it would have been obvious to one of ordinary skill in the art to use hot air as a heating method. Applicant traverses this rejection under 35 U.S.C. §103(a) because claim 8 depends indirectly from claim 1 and is patentable for the same reasons that claim 1 is patentable. Applicant also traverses the rejection of claim 8 under 35 U.S.C. §102(b) because Miki fails to teach all elements of the

claim, as acknowledged by the Examiner: Miki . . . “fails to explicitly state that the heating is accomplished by hot air.” Office Action mailed October 5, 2005, ¶4, lines 3-4.

Applicant traverses the rejection of claim 5 under 35 U.S.C. §102(b) or 35 U.S.C. §103(a) because claim 5 depends from claim 1 and is patentable for the same reasons that claim 1 is patentable. Furthermore, as described above, nowhere does Miki teach “gripping the balloon neck area with clamps on either side of the joint, and applying the tensile force between the clamps,” as required in part by claim 5. As stated by the Examiner, Miki “fails to directly disclose the stretching to occur between clamps,” and “it is unclear where the clamp or clamps are located.” See Office Action mailed October 5, 2005, ¶4, lines 10-12. Therefore, this rejection of claim 5 under 35 U.S.C. §102(b) is improper because Miki fails to teach all elements of the claim.

The rejection of claim 5 under 35 U.S.C. §103(a) is improper because, in order for a single reference to render a claim obvious, there must be a showing of a suggestion or motivation to modify the teachings of that reference to the claimed invention in order to support the obviousness conclusion. See *B.F. Goodrich*, 72 F.3d at 1582, 37 U.S.P.Q.2D (BNA) at 1318. There is no such showing of a suggestion or motivation to modify Miki. Absent such suggestion or motivation in the reference, one of ordinary skill in the art would not have found it obvious to modify the method of Miki by “gripping the balloon neck area with clamps on either side of the joint,” as required in part by claim 5 because nowhere does Miki teach stretching of joint 22 itself. Rather, Miki teaches stretching only the portion of inner tube 5 that protrudes distally beyond joint 22 for the purpose of creating taper 24.

Claim 3 has been rejected under 35 U.S.C. §103(a) as unpatentable over Miki. Claim 3 depends from claim 1 and is patentable for the same reasons that claim 1 is patentable.

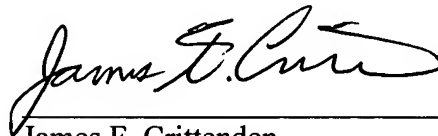
Claim 6 has been rejected under 35 U.S.C. §103(a) as unpatentable over Miki in view of U.S. Patent No. 6,336,488 to Vannan *et al*, hereinafter “Vannan.” Claim 6 depends from claim 1 and is patentable for the same reasons that claim 1 is patentable. Furthermore, the rejection under the combination of Miki and Vannan is improper because Vannan is non-analogous art. Vannan is directed to a subassembly for a tubeless pneumatic tire, which cannot be considered analogous to a process for forming a thinned joint between a polymeric balloon and a polymeric catheter shaft. Therefore, Vannan is not related to the Applicant’s field of endeavor, and is not reasonably pertinent to the particular problems being solved by Applicant’s invention. *In re*

Oetiker, 977 F.2d 1443, MPEP 2141.01(a). Also neither Miki nor Vannan contains any suggestion or motivation to combine one reference with the other (MPEP 2143.01). Thus, in rejecting claim 6, the Examiner has not presented all the elements of a prima facie of obviousness. In view of the above arguments, Applicant requests that the rejections under 35 U.S.C. §103 be withdrawn.

Conclusion

For the foregoing reasons, Applicant believes all the pending claims are in condition for allowance and should be passed to issue. The Commissioner is hereby authorized to charge any additional fees which may be required under 37 C.F.R. 1.17, or credit any overpayment, to Deposit Account No. 01-2525. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at telephone (978) 739-3075 (eastern time).

Respectfully submitted,



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